CLAIMS

Please amend the previously presented claims as follows:

15. (Currently Amended)   Process for estimating a propagation channel formed by successive symbols of a multi-carrier signal each comprising at least one reference pilot and a plurality of frequencies carrying data, the process comprising:

    extracting the said at least one reference pilot~~(s)~~ present in each of the said symbols;

    obtaining a first estimate of the said propagation channel, by ~~analysis of~~ time/frequency interpolation on the said extracted reference pilot;

    independently correcting the said reference pilot, in phase and amplitude, and as a function of the said first estimate, to output pilots with phase and amplitude correction, said correction step including a step to calculate an amplitude and phase error vector for each of the said reference pilots;

    obtaining a second estimate of the said propagation channel, by analysis of the said corrected output pilot.

16. (Cancelled)

17. (Currently Amended)   Process for estimating a propagation channel according to claim ~~16~~ 15, wherein the said error vector calculation step includes averaging of a set of error vectors obtained on at least one symbol.

18. (Previously Presented)   Process for estimating a propagation channel according to claim 17, wherein the said averaging is calculated on each symbol.

19. (Previously Presented)   Process for estimating a propagation channel according to claim 17, wherein the said set of error vectors only includes error vectors that satisfy at least one predetermined quality criterion.

20. (Currently Amended)   Process for estimating a propagation channel according to claim ~~16~~ 15, wherein the said calculation step for an amplitude and phase error vector comprises a preliminary step in which the said pilots with an amplitude less than a first predetermined minimum average threshold and/or greater than a second predetermined maximum average threshold are rejected.

21. (Previously Presented)   Process for estimating a propagation channel according to claim 15, wherein the said second estimate includes an equalisation step that depends on the first estimate.

22. (Previously Presented)   Process for estimating a propagation channel according to claim 21, wherein the said equalisation step is performed on all carrier frequencies of each of the said symbols.

23. (Previously Presented)   Process for estimating a propagation channel according to claim 21, wherein the process comprises a step after the said equalisation step to calculate a pulse response of the propagation channel as a function of the at least one reference pilot equalized by the equalization step, for refining synchronisation of receivers in time.

24. (Previously Presented)   Process for estimating a propagation channel according to claim 15, wherein the said the reference pilot correction step includes a division of these pilots by the first estimate.

25. (Previously Presented)   Process for estimating a propagation channel according to claim 17, wherein the said correction step of the at least one reference pilot also includes a final step to correct all equalised useful carriers taking account of an average value obtained as a result of the said averaging.

26. (Previously Presented)   Process for estimating a propagation channel according to claim 15, and further comprising using the process for correction of at least one phase and/or amplitude error common to two cells in a same OFDM (Orthogonal Frequency Division Multiplex) type symbol.

27. (Currently Amended)   A device for estimating a propagation channel formed of successive symbols of a multi-carrier signal each comprising at least one reference pilot, and a plurality of data carrier frequencies, the device comprising:

    means for extracting the said at least one reference pilot present in each of the said symbols;

    means for making a first estimate of the said propagation channel, by ~~analysis of~~ time/frequency interpolation on the said extracted at least one reference pilot;

    means of independently correcting the said at least one reference pilot, in phase and amplitude, as a function of the said first estimate, to output one or more pilots with phase and amplitude correction, said correction step including a step to calculate an amplitude and phase error vector for each of the said reference pilots; and

    means of making a second estimate of the said propagation channel, by analysis of the said one or more pilots with phase and amplitude correction.

28. (Currently Amended)   A device for estimating a propagation channel formed of successive symbols of a multi-carrier signal each comprising at least one reference pilot, and a plurality of data carrier frequencies, the device comprising:

    an extraction element, which extracts the at least one reference pilot present in each of the said symbols;

    a first estimation element, which makes a first estimate of the propagation channel, by ~~analysis of~~ time/frequency interpolation on the extracted at least one reference

pilot;

a correction element, which independently corrects the at least one reference pilot, in phase and amplitude, as a function of the first estimate, to output one or more pilots with phase and amplitude correction, said correction step including a step to calculate an amplitude and phase error vector for each of the said reference pilots; and

a second estimation element, which makes a second estimate of the said propagation channel, by analysis of the one or more pilots with phase and amplitude correction.